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JUNE, 1951

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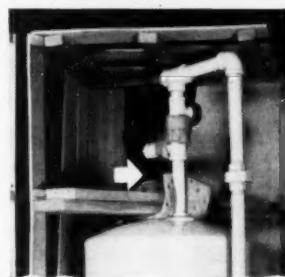
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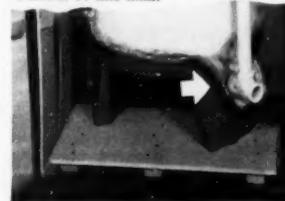
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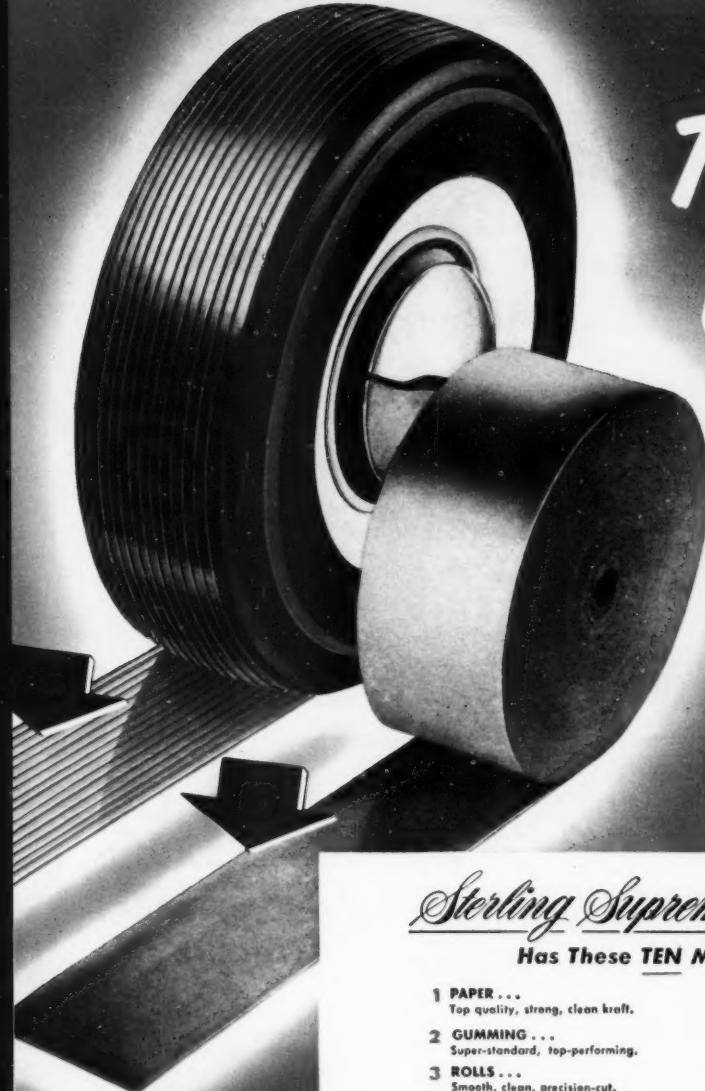
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UNITED STATES STEEL

Packing A Punch.. By S. St.

"CONDITIONS during the war make a high rate of damage inevitable," says the Research Institute of America, Inc. "There isn't much you can do about heavy loading of freight cars, shortage of experienced labor and proper materials, careless unloading, restricted use of steel strapping, etc."

"Wise companies aren't leaving the damage-in-transit problem up to the carriers. Even when the carrier pays the claim, damaged shipments cost you time in investigating and settling, to say nothing of loss of reputation and good-will with your customers.

"The fact that you don't get complaints on shipments doesn't necessarily mean your packing job is 100 percent perfect. The railroads may be getting the complaints from your customers. (Railroads say that 95 percent of damage claims are filed by the consignee.) There are some cases where shippers never suspected poor packing, and even tried to cut down costs by using cheaper containers of lower strength values.

"Experience of the railroads and express companies shows a number of reasons for damage which are within the shipper's power to control. Here are the key points to check:

"Pre-test your shipping containers if there is any doubt about their strength. There are a number of standard methods used to test different resistance properties for various commodities. If you're not familiar with them, ask your trade magazine or association about what is being done in your industry. There are also a number of private laboratories which can do the work for you.

"Carriers and industry associations are pushing to develop performance standards for shipping containers. These differ from standards based on materials specifications, in that they measure the resistance of a container to the specific hazards it meets in transit. Although some of the testing equipment is fairly expensive and requires trained operators, the drop table (which simulates rough handling) is one piece of apparatus that is simple and inexpensive. It is particularly handy for comparing the merits of inner packing materials, and for measuring closure efficiency. Some companies use it to spot-test claims made by container salesmen.

"If you have a consistent damage record on any kind of shipment, it's often a good idea to call in a packaging expert. Causes of inadequate protection are numerous—faulty package design, poor containers or packing materials, wrong interior packing, unskilled use of filling materials and padding, improper closing, etc. Sometimes a change in the design of the product itself is necessary."



JUNE, 1951

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FOR SHIPPING AND TRAFFIC EXECUTIVES
425 FOURTH AVENUE, NEW YORK 16, N. Y.

JUNE 1951
VOLUME 16
NUMBER 6

Poor Export Packing Is Costly

-- And, It May Well Hurt The Defense Effort

By Andrew D. Warwick, President

T. Hogan & Sons, Inc.
New York City, New York

IN A DISCUSSION such as we are conducting here on the important subject of Export packaging, it is necessary for the speaker presenting one phase of the main topic to clearly indicate the scope of his particular subject in order to avoid repetition and confusion. Stevedoring has as one of its characteristics flexibility. This means that the scope of an operation can be expanded or contracted depending upon location and conditions. For the purpose of this discussion we will establish the scope of our stevedoring operation by using the vessel as one end of our line and the terminal with variations as the other.

Generally speaking, stevedoring is the loading and unloading of vessels. To be more specific, it is the handling and stowing of cargo in the vessel, controlling the movement of cargo between the vessel and the terminal, handling cargo in the terminal when in direct operation with the vessel and finally working alongside of the vessel where lighters are used.

Handling cargo in the vessel means stowing and securing the cargo in a predetermined location in the vessel. The location must be planned prior to loading because the safety of the vessel and the cargo, depend upon proper distribution of the weight in the vessel and the stowage of one commodity in relation to another.

Controlling the movement of the cargo between the vessel and the terminal is the actual lifting and lowering of the cargo with ship's gear or other special shore or floating equipment.

Handling cargo in the terminal when in direct operation with the vessel is taking the cargo from a place of rest in the terminal and moving it directly into a ship. Terminal operations as such have not been considered in this presentation due to the fact that they deal with the loading and discharging of lighters, trucks, and railroad cars in the terminal separate and apart from the over-all stevedoring operation.

Much Cargo Is Loaded by Lighter

Working lighters alongside of vessels is the general practice in a Port such as New York where at least 30% of the total cargo moving through the Port is carried to and from the vessels by lighters. The overside work on lighters has its advantages and disadvantages but it does relieve to some extent the congestion in the terminals.

Inasmuch as the vessel is one of the most important factors dealing with Export Packaging it will be helpful to describe the characteristics of a modern vessel. The vessel has approximately 500,000 cubic feet of cargo space below deck, distributed in five holds. Each hold is divided into a lower hold and one or two 'tween decks. Some vessels have deep tanks designed to carry dry cargo or bulk oil, located in the area normally occupied by a part of the lower hold. Other vessels are equipped with refrigerator compartments in the 'tween decks for the movement of chilled and frozen cargo. It has been commercial practice also to construct special lockers in one or two of the 'tween

decks for the protection of special cargo. The vessel has five hatches or openings ranging from 20' x 20' to 20' x 35' through which cargo is loaded and discharged. It also has sufficient booms and winches to work double gangs in three of the five hatches. The working booms are of five and ten ton capacities. The heavy lift booms of which there are one or two per ship have lifting capacities up to 50 tons.

Difference Between Longshoremen and Stevedores

The personnel used for the stevedoring operation are longshoremen. To clarify a general misunderstanding in nomenclature, the longshoreman is the employee and the stevedore is the employer. There are other local designations but the aforementioned is generally accepted in the industry. The longshoremen are divided into three main groups: holdmen, deckmen, and dockmen which includes the drivers of mobile equipment. The holdmen handle the cargo in the vessel and stow it according to plan and established practice. The deckmen operate the winches and perform all the rigging and hoisting services required. The dockmen perform the necessary terminal, car, and overside work to complete the over-all stevedoring operation.

Progress in material handling has necessarily required the stevedore to keep pace by investing heavily in modern mobile equipment and special hoisting gear. There are very few industries that require the large assortment of expensive special gear items similar to those supplied by the stevedore. The reason being that the thousands of different shapes, sizes, and weights that together make up the cargo carried in a vessel must be lifted in and out and moved in the vessel to its proper location. Mobile dock cranes, lift trucks, and tow cars are a few of the units necessary to maintain efficient terminal transportation. Platform slings, nets, trailers, wire and rope slings of all sizes and lengths are a few of the many stevedore gear requirements. Mobile equipment is also used in the vessel when conditions permit their use.

From the stevedoring point of view, it is wasteful and expensive to handle cargo improperly packaged and unable to stand normal reasonable handling.

It is wasteful because the loss of vessel cubic, the additional hours of wasted labor consumed in handling and the eventual poor turnout at destination are all translated into dollars. Whether these are paid for by the shipper, the stevedore, steamship company, railroad, or the insurance company does not alter the fact that it is waste pure and simple. The improvised lashing and coooping boards attached along the route to the inadequate protection given many pieces of valuable equipment at its point of origin is in itself a testimony of waste. All the research and valuable information available on packaging is wasted if it fails to stimulate constructive action by all concerned.

Losses Due to Poor Packing

It is expensive because the stevedore like the railroad, the steamship company, and the terminal operator,

World's Largest Ram Truck Is Built for Steel Industry



WORLD'S LARGEST RAM TRUCK

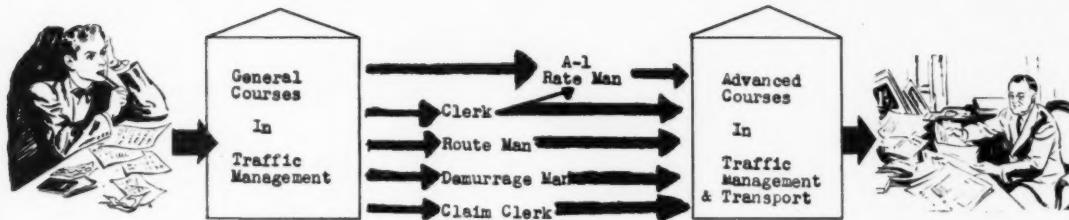
This is the "World's Largest Ram Truck" produced by the Yale & Towne Manufacturing Company's Philadelphia Division. Built for the steel industry, this 80,000 pound giant is designed to slash handling time, hike output, and increase quality of cold rolled strip steel now in critical supply.

Weighing-in at 84,000 pounds, the new power truck is powered by a unique diesel electric unit of the same size used in a 25-ton locomotive. On the front of the truck are two huge, snout-like rams that open and close like a scissors. These unique rams provide, for the first time, a unit that can carry one large coil of steel or two smaller ones. It's the first of a new series of ram and fork trucks now available in capacities from 20,000 pounds to 10,000 pounds.

works on a tariff or contract rate basis with his principal. Rates are based on experience and past performance. The normal stevedoring gang employed to handle general cargo, furnished with equipment, protected by insurance, supervised and covered for other miscellaneous requirements, represents an hourly straight time investment of approximately \$70 and overtime hourly cost of approximately \$100. The average ship operation working all hatches single would mean 5 gangs. Resolving this into a single ship hour of straight time stevedoring work represents \$350. The overtime for a single ship hour of stevedoring work is \$500.

It is not exaggerating to say that a single piece of machinery improperly protected will consume one-half hour more of gang hour time than the same piece of machinery adequately cased. To the stevedore this represents an added straight time handling expense

(Continued on Page 23)



Students who graduate from general courses in traffic management can move on to jobs as clerks, route men, demurrage men or claim clerks, and in some cases directly to A-1 rate man positions. After they have had some experience they can take advanced courses which will help qualify them for executive positions.

Expanding Traffic Departments

Have Need For Trained Men

IN CONSIDERATION of the great new need for traffic and shipping executives in departments of companies preparing for new mobilization needs all over the country a member of the staff of SHIPPING MANAGEMENT was sent out to obtain an exclusive interview with an expert on the training of traffic executives. Mr. E. W. Traver is President of the Traffic Managers Institute, which conducts correspondence and class-room courses for beginning and advanced traffic men on a nation-wide basis. A series of questions were prepared, which Mr. Traver answered out of his wide and extensive personal knowledge.

Chief facts to emerge from the interview was that traffic departments have to be enlarged, and great difficulty is being found in obtaining men to fill the many positions which are opening up. From the viewpoint of the beginner in the profession the picture is much the brightest it has been for many years. Entrance salaries are at a peak, and thoroughly qualified A-1 Rate Men are now being started at \$85 and up, while clerks in the traffic department are being started at \$50, \$60, and even \$70 a week.

Here are the questions and the answers as supplied by Mr. Traver.

Questions and Answers

1. What is the traffic manager's role in an economy changing from peace-time to a full war footing?

Every industry, every railroad, every motor carrier must have a larger traffic department to take care of added work and government orders. Correct and efficient shipping are most important at a time like the present.

2. What should the practising traffic man do to

freshen up or to be better prepared for the coming war crisis?

The traffic manager should keep up with changes in classifications and up-to-date tariffs. Schools such as T.M.I. maintain texts which are kept right up-to-date at all times, with Interstate Commerce Commission changes added to the texts week by week. Addenda are inserted in loose-leaf fashion, weekly, and monthly in the advanced courses.

3. What kind of jobs are available to men wanting traffic and shipping careers in the present and forthcoming mobilization period?

Jobs are opening in every conceivable industry, on every railroad, with every motor carrier and steamship and air line in the traffic, shipping and packing departments. The expansion is general and cannot be confined to any one industry, or even a small group of them.

4. What kinds of courses should such entering young men take and how will these courses benefit them?

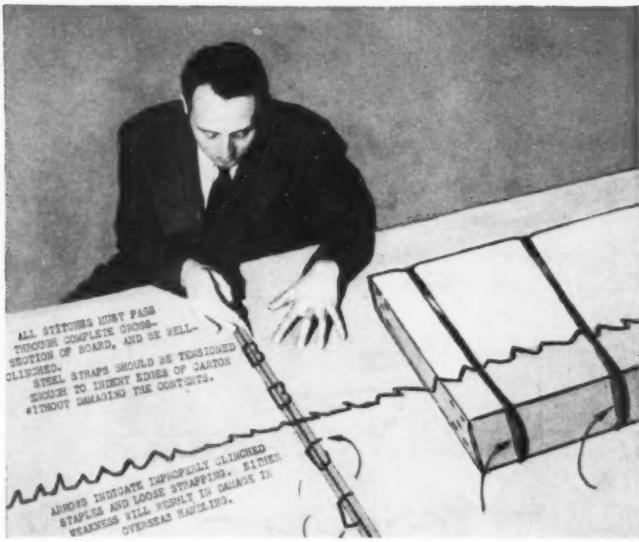
For the beginner who wants to learn the fundamentals of traffic management a general course in freight traffic management is highly recommended. Such a course will usually take about a year.

Later on courses in export and import traffic and procedure, air freight traffic management, motor carriers, advanced courses in freight traffic management, and a course in preparation for examination to qualify for practice before the Interstate Commerce Commission, be taken.

5. How can students become familiar with government packing specifications, so important in working with defense contracts?

The man who is familiar with general packing

(Continued on Page 24)



Expert Packing & Shipping

ARTICLE IV

By CLIFFORD H. KEITH
Special to Shipping Management

"Waterproof Solid Fibre Board Came Into Its Own In World War II And Will Prove Value Once Again"

WEATHERPROOF V AND W BOARD, used for overseas shipments represents one of the top packaging developments of the last 10 years. These export containers are more costly to produce than conventional corrugated and require greater effort in packing but the end result is maximum protection for the product.

During World War II comment flowed freely as to the undesirability both by manufacturers and shippers, of using a new and more costly board. The same comment can be heard again, but to a much lesser degree because most shippers realize the advantages of waterproof solid fibre. Wartime overseas shipments are exposed to unbelievable extremes in shipping hazards. They must be ready for instant use whether they are unboxed in the icy colds of Alaska or in the unpredictable weather of Korea. V and W boards are extremely rigid, puncture resistant to an amazing degree and waterproof.

A tremendous amount of research went into perfecting these boards and much of the credit should go to the leading adhesive manufacturers. Without a waterproof adhesive with which to laminate the several plies of fibre V and W board would not exist. Most of the adhesives consist of special starch combined with urea formaldehyde resins which not only retain their bond under water but also reduce penetration of moisture through the plies of fibre.

Additional waterproofing is accomplished through the use of asphalt barriers applied in the form of duplex sheets. These sheets are laminated with asphalt and used as the outer liners of the container. In some instances an asphaltic emulsion is used; either added to the adhesives used to laminate the plies or used in the beaters while the paper is being made. All in all a lot of work goes into forming a sturdy board. From the time the blank is delivered to the packer it becomes his job to see that a proper package is formed and shipped.

Amendments to JAN Specs

Shippers who have never worked on government orders or not since World War II are having to do some home work on their military regulations. Overseas packaging and packing are governed by Joint Army and Navy specifications JAN-P-108 and amendment 4 issued September 1950.

Briefly, an overseas bound container is properly sealed if the following measures have been taken.

- a. It has been stapled or stitched with steel stitching wire measuring at least 0.020" thick and 0.098" wide. These stitches or staples should be inserted over entire panels of contact. They should be planed within

(Continued on Page 32)

Loads of Pumps Handled With This Tray and Skid System

THE SUNDSTRAND MACHINE TOOL Company, Rockford, Illinois, has developed a new and more economical method of shipping oil burner pumps which shippers of small units used in defense or essential civilian production will find interesting and practical.

Formerly, these pumps were shipped in individual cartons at considerable expense. With assistance from the Research Division of Signode Steel Strapping Company, Sundstrand developed a tray and skid system to handle 150 oil burner pumps in one unit.

Each tray is drilled, top and bottom, to handle 30 pumps. Trays fit snugly over the pumps on the tray below. The bottom tray has a skid base. Four trays are placed on top of it. To protect the pumps from dust and moisture, a water-proof cover is placed over the skid. Then the entire load is packaged into a single unit with bands of tensioned steel strapping.

The advantage to Sundstrand and its customers is in the ability to handle a large number of pumps at one time with mechanical equipment. The trays and skid are returnable. In the Sundstrand plant, this method has greatly simplified materials handling problems. The pumps are brought to the shipping room on overhead conveyors, removed, inspected and placed on trays. When a skid load of 150 pumps is ready, it is bound into a tight, pilfer-proof unit with four bands of $\frac{3}{4}$ " x .020 steel strapping, applied with the A-3420 Seal-Feed strapping machine.

New Method Of Recording Parcel Post

Receipt of Parcel Post is not a major operation, nevertheless we average 14,000 packages per month.

Our former practice was to have the Receiving Clerk call to a typist, who recorded the information onto the receiving sheet or record. The place of work, while

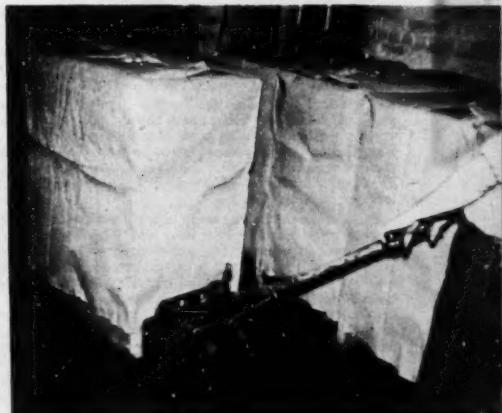
(Continued on Page 31)



1. OIL PUMPS RECEIVE FINAL INSPECTION.



2. EACH TRAY A JIG TO HOLD 30 PUMPS.



3. FIVE TRAYS FORM A COMPLETE PALLET.

Maintain Your Power Trucks

14 Pointers To Keep 'Em Rolling During The Emergency

FOURTEEN WAYS to lower operating costs of electric industrial trucks were outlined recently by Charles Greener, general service manager of the Automatic Transportation Company.

Planned preventive maintenance assures reduced service budgets, longer truck life, and less "down" time while trucks undergo repairs, Greener said. His program for one-truck or fleet operations, based on studies of successful techniques, includes these recommendations:

1. Loads should suit the truck. Teach your operators that truck capacity varies with load length, and that continual overloading causes serious breakdowns and plays havoc with tire bills. Use trucks with ample reserve capacity.
2. Keep floors clean and in good condition. Bad surfaces cause damaging strains and shocks, and again your tires suffer unnecessarily.

3. Replace tires when they develop flat spots or when big chunks of rubber are gouged out. Stretching tire use damages the truck, costs you far more in repairs than you think you are saving, and is bad for driver health and efficiency.

4. Let the right man—the mechanic—do repair work. When something goes wrong, have your operator call the mechanic, and don't let him have the truck pushed or towed without the mechanic's orders.

5. Your operators should be trained thoroughly in proper use of equipment assigned to them. Whenever possible each man should work permanently with the same truck.

6. When you get a new truck, be sure to obtain full information about it. Have the manufacturer's service representative demonstrate it for your operators. He should advise your maintenance force, explain spare parts needs, and make sure no damage was incurred in shipment.

7. Your mechanical maintenance program, whether large or small, should follow a regular schedule. Use a series of mechanical worksheets or tags prescribing services to be performed. Keep a fleet maintenance record to learn the life expectancy of important units of the truck. This enables you to make necessary changes in advance to avoid complete breakdown, preventing loss of operating time.

8. Trucks need a monthly lubrication and mechanical check, usually requiring about an hour and a half, which should follow removal of dirt and grit from the undercarriage. Fleet operation calls for a cleaning rack in a small room or enclosed area. A weak alkaline solution applied under steam pressure does a good cleaning job, and compressed air is best for drying. After the mechanical check, lubricate the truck. Make a large blow-up of the manufacturer's lubrication chart so your maintenance men can follow it easily. During the check, put the truck through its paces thoroughly in all speeds, and with a normal load.

9. Semi-annual mechanical checks and lubrication are more extensive. Included are cleaning and repacking wheel bearings, changing drive axle grease or oil, and any other services not assigned to the short-term checkups.

10. Electrical checks should be conducted on a weekly, monthly, and semi-annual basis. The weekly check includes



tightening loose fittings and replacing worn or damaged ones. Monthly, all electrical operations should be observed closely, and semi-annually, the complete electrical inspection will save you money. Tightness of electrical connections and proper insulation of wires should be noted carefully.

11. Be careful with your batteries. Overwatering will weaken the electrolyte, and when it spills over from the battery case, the electrolyte causes corrosion of other truck parts. Flushing the battery is a necessity, as the battery must be kept clean. Make this part of the weekly inspection. Use properly maintained automatic charging equipment.

12. General overhauls should be scheduled according to your operating conditions, such as the number of hours the truck works daily, plant conditions, and the driver's ability.

13. Keep a weekly log for each truck, on which you record inspections, lubrications, and cleanings. This permanent record will help you make sure necessary preventive maintenance functions are performed.

14. The program outlined above is based on one shift a day, and favorable operating conditions. Under rough conditions, such as bad floors, more than average dirt, or more than one shift a day duty, trucks require more frequent use of some or all of these checks. It is wise to consult with the manufacturer's service representative in regard to this.

Greener recommended that truck users treat preventive maintenance as a money-saving part of their operation. Properly conducted, it will permit finding out which operators are not doing their jobs well, which trucks are assigned to jobs for which they are not fitted, and what changes can be made in truck design to improve their utility.

He also noted that the present production emergency and restrictions on materials will make industrial trucks and parts harder to obtain.



Above: Left, members of the New Jersey Chapter, American Material Handling Society examine paper bags packaging sugar in Naval Supply Depot storage warehouse. Center, preservation room at the Facility. Dipping tanks are shown. Right, examining glued unit loads and expendable pallets at the standing exhibit of materials at the Facility.

Packing Research By The Navy

Vital Studies Made In Packing, Corrosion Prevention, and Materials Handling At Depot

NOT LONG AGO MEMBERS of the New Jersey Chapter, American Material Handling Society, friends and guests, several hundred strong visited the Naval Depot at Bayonne to examine the storage and research facilities in materials handling and preservation. An entire day was spent, and members and friends were agreed by its end that the Navy was doing work which would be of value to every civilian industrial firm and manufacturer. The following report is from an official program given to the members who went on the tour.

IN APRIL OF 1949, the Secretary of the Navy established the U. S. Naval Supply Research and Development Facility under the management and technical control of the Bureau of Supplies and Accounts. The mission of the Facility, as set forth by the Secretary of the Navy was "to perform the necessary research and development in the fields of supply engineering research, commissary research and logistics research."

The Facility located at the Naval Supply Depot, Bayonne, New Jersey, operates under the command of Rear Admiral C. L. Austin, Supply Corps, U.S. Navy, with Lieutenant Commander R. C. Simmons, Jr., Supply Corps, U.S. Navy, coordinating the activities of the three divisions.

The Supply Engineering Division takes in the fields of packing, packaging, preservation, materials handling, warehousing, ship loading and amphibious cargo handling.

The Commissary Research Division carries out investigations in the fields of shipboard rations, food stowage, food preparation and service, nutrition and related equipment and techniques.

The Logistics Research Division works on the investigation, analysis and evaluation of logistics data pertaining to naval operations from all available sources.

The Division, further, publishes pertinent reference data in a readily accessible form for use in logistics planning at all levels of command.

Supply Engineering Division

The function of the Supply Engineering Division is to conduct research in the fields of materials handling, warehousing, packaging, preservation, shiploading and amphibious cargo handling, which are peculiar to the Navy; or of which the Navy is the principal using agency or authority; and to develop the equipment, methods, systems, and techniques therefor.

The projects assigned to this division are originated by the Research and Development Board of the Department of Defense. That agency also coordinates the Research and Development work of other government departments and agencies so as to eliminate duplication and to insure continued pursuit of primary objectives.

The general areas of work in process at this activity are the research in and development of:

UNIT LOADS—Unit loads of various commodities with and without pallets, using glue, round wire and flat steel strapping. Development of an inexpensive container for overseas shipment to eliminate pilferage and costly export packaging of individual items. All of the above must be suitable for shipment by highway truck, railway cars and cargo ships. Each item developed must be designed for handling by mechanized materials handling equipment.

PALLETS—A general purpose pallet for shipment of unit loads by motor carrier and by railroads that is appropriate for unit load warehousing.

CARGO LOADING PATTERNS—Testing

(Continued on Page 31)



Left and below: several different varieties of Teenuts. United-Carr Fastener Corporation produces the nuts which have a multitude of uses, particularly in palletizing and other materials handling operations.



There Are 655 Uses For These Nuts Which Are Used In Palletizing

AT THIS TIME shippers will find the account of the versatile nut which has so many uses in pallets, and other packing and shipping operations a useful consideration in their operations. First used extensively in the last war they are now finding acceptance in an increasingly wide range of uses.

In form, Teenuts resemble threaded, flanged bushings, drawn from a thickness of strip steel, brass, aluminum or stainless steel suitable to maintain the strength characteristics required. They are fabricated in a multitude of flange shapes and sizes, with coned points or long pointed prongs and brad holes for use in wooden articles, plain flanges for spot welding and extruded studs for projection welding, slots to permit application by spanner wrench, and hex shaped for use with standard wrenches. The length of the Teenut barrel is more than sufficient to provide an interengagement of threads which will withstand any normal axial stresses tending to strip the threads of either the screw or the nut.

Many War Uses

Teenuts found large usage in World War II in automotive equipment, ammunition cases, and shipping containers. Postwar applications are numerous in the automotive, refrigeration, and radio industries.

The Teenut was originally designed for application to wood, and its acceptance by many industries was due to the fact that it eliminated the necessity for counterboring to obtain a flush condition, and that it combined, in effect, a nut with a washer. Furthermore, it met a need for a nut which could be retained in the

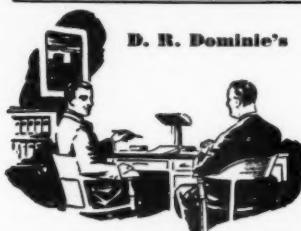
wooden article until the application of the bolt in a later stage of assembly operation. There are over 655 special and standard Teenuts which are continuously fabricated for various applications.

A few basic wood applications are capped Teenuts with three short prongs, for corner assembly on plywood beach or station wagon bodies; long-three-pronged Teenuts, for attaching hinge bolts to wood; long-four-pronged Teenuts, for attaching rugged metal to wood assembly; curved-flange Teenuts, for attaching plywood to tubing; reinforcing Teenuts, for attaching plywood to a light wooden member; slabbed Teenuts with two long prongs, where space is limited; and slotted-flange Teenuts, for carriage bolt assembly, which are tightened by means of a spanner wrench. Thread sizes range from 4-40 to $\frac{1}{2}$ -20, with a barrel length and diameter designed to give maximum strength with a minimum of weight. If Teenuts have to make an extra good appearance, they can be assembled in many sizes with buffed stainless steel or chrome-plated caps.

Versatile For Pallets

Of interest to pallet manufacturers who are using carriage bolts, lockwashers and nuts to connect deck boards and stringers, and where assembly time is a factor and repairs by the user a normal requirement, is a locking type Teenut. This patented construction consists of pressing inwardly the barrel of the Teenut on one side only, intermediate the ends of the barrel. As a result, a substantially "D" shaped cross section is obtained through the pressed portion. At the same time, the ends of the barrel remain circular so as to permit the screw or bolt to be inserted freely into

(Continued on Page 26)



D. R. Dominie's "LISTEN, Mr. Traffic Manager"

ONE OF THE LESS IMPORTANT but common functions of a Traffic Manager are the so-called "Government" jobs. In the jargon of machine shops, carpenter shops, etc. "Government" jobs mean doing something for yourself or someone in the company which is strictly of personal nature and done on company time. It is surprising how much of a Traffic Manager's or a Shipper's time is taken up by these "favors," particularly where they are not usually a routine function. Just as a tally we kept a list this past month of some of these so-called "Government" jobs which we performed. The only consoling feature about some of these is that it affords the Traffic Manager or the Shipper a chance to gain some knowledge which we otherwise might not get in the normal course of duties.

For example one of the jobs came up when one of the secretaries wanted to ship a cat from Boston to her sister in Miami. The lesson we picked up from that case was that animals such as that, to be shipped via Air Express must have a vet's certificate before being acceptable for shipment. We also learned that many veterinarians have cages which they will rent to the shipper for just this purpose. In addition to the certificate the shipping room had to handle completely which of course took time.

Another time consuming job came up when one of the machine shop boys wanted us to handle a load of lumber which he had purchased from a local supplier and have it shipped to some out of the way place in the country so he could build himself a summer camp. This is typical of the type of request received by the shippers. In most instances it turns out to be a reciprocal arrangement for the favor done by them is often returned by the others.

One very interesting "favor" came up. One of our representatives had been temporarily stationed in a hot, dry midwestern city, a condition which he did not particularly like. Every few weeks or so another member of our concern would visit him and tease both him and his wife by mentioning the delicious live lobsters which the folks at home were eating. In this particular spot there was no such thing available and the teasing finally brought the employee to a slow burn. The ultimate result was that the Traffic Department was requested to find out if it was possible to ship this fellow a few fresh, live lobsters. We knew at the outset that countless lobster houses fly large quantities to midwestern and southern cities in bulk but this was

to be a few to an individual. Upon investigation we were surprised to find several lobster houses on the eastern seaboard that, for a slight extra charge, would ship and pack live lobsters to any point in the country. The houses permit the shipper (customer) to pick out any number and weight of lobsters he desires. The house will then pack for safe shipment and deliver the shipment to the air express office. All in all, a good way to treat your employees.

Materials returned for repair are a general problem to most manufacturers of household appliances, watches and the like. One of the large costs is that of the paper work, particularly the receiving forms and the shipping forms. Normally, this is done on two separate forms. However, we have recently devised a form which accomplishes both operations practically at once. In effect, a snap-out type of shipping order is used as the receiving form. The receiver, as a receiving report, types in all of the pertinent information such as name and address; material received, etc. just as if he were making out a receiving form. This is then sent to the repair department, material repaired, and the original form with all information on it is used as a shipping order. Actually a three-in-one operation.



In our March column we stated "While on the subject of metered mail tips we might mention a corrective measure to be taken in case first class mail has been run through the machine with either the wrong date on it or no date at all . . . If this happens simply take

(Continued on Page 28)

Katy Stores Dept. Gets Award For Perfect 1950 Safety Record



The Stores Department of the Missouri-Kansas-Texas Lines had a perfect safety record during 1950, with no reportable injuries. At a meeting in Parsons, Kans., March 2, (l. to r.) C. E. Reasoner, General Storekeeper, looks on while Gene Stringer, representing Stores Dept. employees receives President D. V. Fraser's safety award, from M. R. Cring, assistant to the President—public relations, St. Louis. B. A. McDonald, Katy Supt. Rules-Safety stands to the right of Mr. Cring.

NEW PRODUCTS & LITERATURE



PLATFORM BOX GLUER

A new platform box gluer, made by Potdevin Machine Co., can apply a coating of adhesive to platform style boxes up to 3 inches high. The box section is fed through the gluer which applies an even coating of adhesive over the entire surface. The operator then places the glued piece on the platform.



Adhesive is placed in a removable stainless steel tank and kept at the correct workable temperature with a thermostatic control. Coating thicknesses are accurately regulated with a coating adjustment control. Thorough adhesive coverage is accomplished by a ductor roller that applies the right amount of glue over the entire area.

Continuous operation is maintained with a 1/3 H.P. 110 volt, A.C. motor. Over-all dimensions: 32" deep, 10 $\frac{1}{2}$ " long, 11 $\frac{1}{2}$ " high. Manufactured in 3 sizes, 6, 8 and 12 inch widths.

PACKAGING ADHESIVE FOLDER

Three export packaging adhesives that meet government specifications are described in a new four-page folder available from Minnesota Mining and Manufacturing Co.'s Adhesives and Coatings division.

All three adhesives are water-dispersed, eliminating the hazard of inflammable solvents, and all three develop "excellent resistance to water" upon drying.

The adhesives are:

EC 824 for sealing flaps of fiberboard boxes, an adhesive that retains its bond at temperatures from -40 to 140° F., and which can be applied by brush, spray or assembly-line machinery; meets military specification JAN-P-101, types I and II.

EC 1025 for adhering caselins, and adhesive that provides a tight bond to both smooth and creped barriers and does not support growth of mold or fungus; meets military specification JAN-P-140, types I and II.

EC 1032 for adhering labels and over-coating them, as adhesive that dries to a clear, colorless film resistant to water, oil and grease, and that dries tack-free in 6 to 7 minutes; meets arm ordnance specification AXS-1472, types I, II, III, and IV, for use on fiberboard, wood, black iron and galvanized iron surfaces respectively.

Also noted in the folder are three other

adhesives where special characteristics are required—EC 863, EC 784, and EC 805.

NEW FLEXIBLE BARRIER MATERIALS

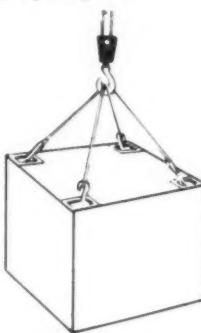
A new line of flexible barrier materials, developed to meet United States Government contract specifications, has been announced by the Crystal Tube Corporation.

Crystal Tube officials declared that production facilities are presently geared to convert plain and printed bags and printed sheets and rolls of kraft-polyethylene, kraft-foil, acetate-foil, and other laminated combinations.

The bags have been designed to meet JAN P-117, JAN B-121, JAN P-131 and MIL 6065 specifications.

LIFT HOOKS

Small in size, but playing a large part in national security, are lift hooks produced by the Neilson Wheel Company, Milwaukee, Wisconsin. Designed to save time, labor, and money in loading heavy cargo, they are the only lift hooks officially approved by the U. S. Army Air Forces for engine packing cases.



Built right into the packing cases as a permanent fixture, these forged lift hooks prevent damage to both cases and contents. When not in use, they lie flush with the tops of the cases.

Neilson lift hooks are designed to lift 20,000 lbs. per set of four. Recently, however, General Electric established the breaking point as 13,000 lbs. per individual hook, additional proof of their tremendous strength and reliability.

Literature and prices of products mentioned can be obtained if you drop a post card to Richard Gertner, News Editor, SHIPPING MANAGEMENT, 425 Fourth Ave., New York 16, N. Y.

Companies having new product stories should send them to the same address.

PORTABLE STAPLE MACHINE

The Boxer weighs only four pounds, three ounces and is the lowest priced machine in the International Staple and Machine Company line.

Like all other International Staple Machines, The Boxer operates on the Retractable Anvil principle—stapling filled corrugated or fibre cartons from the outside.



The Boxer features a new type penetration control which adjusts the depth of the Staple clinch and thereby makes sure that a carton's contents will not be disturbed or damaged by the clinching operation. It also has a new adjustment for the tightness of the clinch itself.

SHIPPING ROOM TACKER

The new all-purpose Markwell "L3" Shipping Room Tacker which uses staples ranging from 11/64" to 9/16" without any adjustment to the tacker has a multitude of uses.

1. Tacking tags to crates, barrels, boxes and bins.
2. Lining freight cars.
3. Corrugated patching of sides and floors of freight cars.
4. Repairing wire bound crates and half corrugated cases.
5. Attaching hardware bags and packing list as well as for closing tote boxes.

FOAMED PLASTIC PACKAGING

Foamed Plastic, (Expanded Polystyrene) is a new light weight, shock absorbing and protective packaging development that goes far in answering many problems in shipping delicate and precision items.

Foamed Plastic has already made many contributions to the packaging field. Primarily, the cellular structure of this new material is responsible for its excellent shock absorbing characteristics. The same cellular make up gives this material exceptional light weight for the cubic content involved. For instance, the weight of a cubic foot of Foamed Plastic is only

(Continued on Page 37)

★ TRAFFIC REPORTER ★

Lieutenant G. F. Blankinship, Officer in charge, Navy Central Traffic Control Office, Freight Trans-Shipment Branch spoke on "difference between military and civilian transportation" at the Women's Traffic Club of San Francisco late in June. The meeting was held at the El Jardin Restaurant.

The annual outing of the Transportation Club of Decatur (Ill.) was held in June at the South Side Country Club. Among trophies awarded was the Transportation Club Cup and the Wheeling and Lake Erie Cup.

Miss Mary E. Clark has been unanimously elected President of the Women's Traffic Club of New York, Inc., for the year 1951-52. Miss Clark, Traffic Manager of Philco International Corporation, Long Island City, New York, resides in Bayonne, New Jersey, attended Columbia University and the Academy of Advanced Traffic in New York. In 1944 during the early days of its organization, she became affiliated with Philco International Corporation and holds her job as Traffic Manager in connection with the Western Hemisphere Division.

The Pacific Traffic Association held its 27th Annual Picnic at Linda Vista Park late in May for members, their families, children and friends. A fine time was had by all. A number of members of the Association attended the Annual Meeting of the Western Traffic Conference in San Diego, May 15, 16, 17.

The Annual Spring Dance of the Charlotte (N.C.) Traffic and Transportation Club was held in May at the Red Fox Country Club. A buffet dinner was served at 7:00 P.M., dancing following immediately.

Members of Tau Alpha Sigma Chapter, Delta Nu Alpha Transportation Fraternity, were hosts on a tour of the facilities of the Albany Municipal Airport conducted jointly by Mr. Glenn Wise, District Sales Manager of Trans-World Airlines and Mr. Harvey Larche, Sales Representative of American Airlines.

At the directional tower operations were explained by representatives of the Aeronautics Division at which time members heard intercommunication between incoming and outgoing airliners. Tau Alpha Sigma Chapter is located in Troy (N.Y.).

Inaugurating a World Trade Weeks' Silver Anniversary, Honorable Dan A. Kimball, Under Secretary of the Navy, spoke on problems of the Merchant Marine defense and national problems to members and guests of the Los Angeles Transportation Club, Inc., late in May. The Club co-sponsored this luncheon with the Propeller Club of Los Angeles-Long Beach, the Advertising Club of Los Angeles, the Women's Traffic Club of Los Angeles, and Merchant Marine, Post 420 of the American Legion.



This "2 strips — not 6" idea is saving important sealing labor in shipping rooms from coast to coast.

Because Snake Tape is reinforced, two strips alone give strap-like strength to cartons. Users report: "Damage claims due to tape failure are unknown."

Isn't it time to try Snake Tape on your cartons? We will gladly mail more facts and a 20-yard test sample at our expense. Send your request now to Angier Corporation, Framingham 9, Mass.

Sturdy cords are imbedded in waterproofing material between two layers of selected kraft. Best animal glue assures a perfect seal. 6 WIDTHS in 100-yd. rolls. Easily dispensed by almost any "cut-off" type machine.

(Left) SNAKE TAPE also gives unexcelled protection to products that "get it in the end." (Photo, courtesy Sloane-Blabon Corp., maker of quality linoleum products.)



Industrial Protective Papers Since 1895
Distributors in Principal Cities

LET SNAKE TAPE BE YOUR ANSWER TO NPA ORDER M-59
This order, effective May 1, 1951, limits the use of steel strapping. We suggest that you carefully review this order and investigate the merits of Snake Tape as the answer to new closure problems.

GOVERNMENT**PERSONALITIES****★ NEWS REVIEW ★**

A digest of recent activities in the packing and shipping field

ASSOCIATIONS**COMPANIES**

FRANK GREEN WILL SPEAK AT JUNE MEETING, PHILA. DIVISION SIPMHE TRAFFIC REPORT

Chief speaker at the June meeting of the Philadelphia Regional Division SIPMHE was slated to be Major Frank W. Green, Chief of the Inspection Division of Packaging and Packaging Officer of the Springfield Ordnance District. The subject of Major Green's talk was "The Professional Approach to Packaging and Materials Handling Engineering."

In civilian life Major Green is a well-known packing consultant to major industry, leading maritime underwriters and carriers. He is a consultant to the Packaging Committee of the Maritime Association of the Port of New York, and Advisor on Packaging to the Associated Industries of Massachusetts.

He has written many feature articles in national publications. He is a regular speaker at the National Short Courses of the SIPMHE.

He serves as National Chairman of the Protective Packaging and Materials Handling Competition. During World War II, Major Green served as Deputy Chief, Packaging Branch, Office of the Chief of Transportation.

PAISLEY INCREASES TECHNICAL SALES STAFF

Paisley Products, Inc., manufacturers of industrial glues, pastes and resin adhesives, recently announced several additions and changes in its Midwestern sales staff, including the opening of two new offices and the addition of three men to its field sales force. Earl C. Lenz, General Sales Manager, reports the following assignments:

Iven G. Nichol who formerly was assigned to the Central Ohio territory has been moved to a new office location in Pittsburgh and will handle the Western Pennsylvania territory and adjoining portions of West Virginia for his company.

Art Hess of the main Chicago office sales staff has been located at Cincinnati, Ohio covering the Miami Valley area and the state of Kentucky.

Malcolm Robinson, formerly located at Cincinnati, moves to the new Southwestern office located at Little Rock, Arkansas and will cover an area from Nashville, Tennessee to Fort Worth Texas, including his home state of Arkansas.

Warren Van Etten, well known to adhesive users throughout Central Ohio will represent his company in Central and Southeast Ohio and Western West Virginia with headquarters at Columbus, Ohio.

Robert Swinney has been named sales service representative in the Kansas City territory which includes portions of Kansas and Missouri.

MOON ELECTED SIGNODE VICE PRESIDENT

At a recent meeting of Signode Steel Strapping Company directors, J. M. Moon, Director of Sales, was elected Vice President of the company. Mr. Moon first became associated with Signode in 1934. His outstanding contributions to the company earned him the title of manager of the field engineering department.



J. M. MOON

In 1947, he was appointed general sales manager . . . a position he held until his appointment as director of sales in 1949.

As Vice President, Mr. Moon will continue in his present capacity as Director of Sales.

H. C. MACDOWELL JOINS BROWN BRIDGE MILLS, INC.

The Brown-Bridge Mills, Inc., manufacturers of Tapes and Gummed Papers, have announced the addition of H. C. MacDowell to their sales force as representative in the Southwestern States.



H. C. MACDOWELL

Mr. MacDowell has been associated with the Atlantic Gummed Tape Company since graduation from the University of Alabama except for three years of service as an officer in the U. S. Army.

Mr. MacDowell will cover the Atlantic

Coast States from Baltimore south on the complete Brown-Bridge line.

ACME STEEL ANNOUNCES SALES STAFF CHANGES

◆ Key changes in Acme Steel Company's eastern sales staff have been announced, effective immediately, by Homer H. Clark, vice president and eastern area manager.

George E. Helm of Towson, Md., has been promoted to sales manager of a new district in Baltimore. An 18 year veteran with Acme Steel, Mr. Helm has previously covered territories in the states of New York, Rhode Island, and Maryland. He will also serve as liaison with government bureaus in Washington, D. C.

Charles E. Klinck of Newton Square, Pa., has been appointed as Philadelphia district sales manager. He will replace Charles J. Brunel who enters semi-retirement until completing his 33 year span of service in October. Mr. Klinck has served chiefly as sales engineer within the same district during 17 years with Acme Steel. He received his degree from Williams College. Coincident with this appointment, the Philadelphia office is moving from 401 North Broad Street to 5667 Ogontz Avenue.

M-K-T RR BUYS LAND FOR PROPOSED YARD DEVELOPMENT

◆ While in Dallas this week, D. V. Fraser, president of the Missouri-Kansas-Texas Lines, announced the purchase by the Katy of a strip of land near Garland, Texas, adjoining the railroad's right-of-way, for a proposed yard development.

The property acquired consists of approximately 108 acres, in a strip extending some 11,000 feet south from the depot building at Garland. The area will be large enough to accommodate extended yard tracks and modern freight house facilities, designed to serve the Metropolitan Dallas area, Fraser said.

"Our present yard facilities in Dallas will soon be inadequate to take care of increasing freight business," Fraser said, "and for some time we have realized that eventually we will have to enlarge our operations here."

FREIGHT MOVEMENTS SET RECORD IN FIRST HALF OF '50

◆ American railroads moved more freight in the average freight train and moved the trains faster in the first six months of 1950 than ever before, William T. Faricy, president of the Association of American Railroads, has announced. The result was, he added, that the average output of transportation for each hour of freight

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Poor Packing Costly

(Continued from Page 11)

of \$35. It is only reasonable to assume that every handling along the route also experienced some degree of delay and expense. A sizable shipment of uniform packages which would normally consume 4 hours of gang time would, if poorly packaged, consume very conceivably 6 hours—an increase in the straight time handling cost of \$140. This should indicate very clearly that Export Packaging affects stevedoring.

Ammunition Damage

During World War II a very critical situation developed in connection with certain types of ammunition. The situation can very well be used to demonstrate the importance of good packaging and its effect upon stevedoring. Single shells of 155mm and 8" calibre were moved via railroad car and shipped to the European Theatre of Operation. The average gang hour production loading the shells into the ship was 20 tons. The shells arrived at the front with damage to 30% of the total shipment. It is staggering to think of the wasted man hours handling the shells and the waste of vital ship space so urgently needed to carry military supplies. The Ordnance Department realizing the need for immediate improvement designed small pallets to carry the shells in an upright position. Eight shells were placed on a pallet with protective covering over the rotating bands. As a result of this improved method of shipment the gang hour production went from 20 tons per hour to 50 tons per gang hour and the 30% damage just about disappeared. The stowage on the vessel was greatly improved as a result of the uniform unit loads as against the stowage of single shells.

Summing it all up it is apparent that packaging in this case increased stevedoring production approximately 150%. It eliminated damage and changed a bad outturn to good. In this particular case one corrective act provided the answer to multiple problems.

"Modern Ship Stowage" a publication of the Department of Commerce lists 146 pages of information dealing only with United States Export and Re-export commodities. There are many duplications of individual items but with all allowances made it demonstrates the magnitude of the cargo handling problem.

The stevedore has the responsibility of utilizing the vessel cubic to its efficient capacity by stowing the cargo to prevent movement in stowage. There is no better way of securing uniform commodities than with the commodities themselves if they are properly packaged. Other commodities due to their peculiar sizes and shapes must be protected by cribbing and chocking. Good stowage requires the use of dunnage for protective and port separations and the filling of voids.

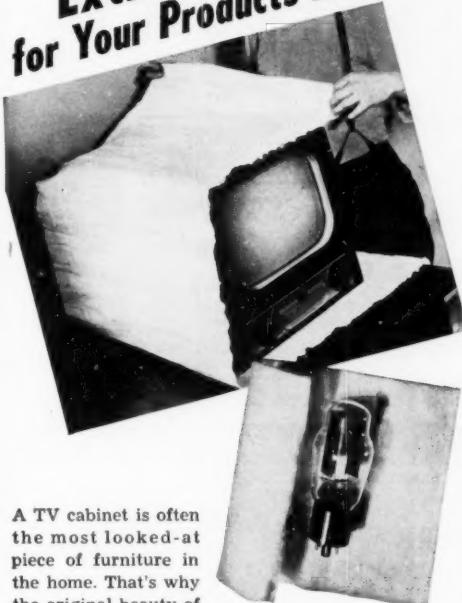
Good Packs Easy to Handle

Sound cargo, properly packaged, presents no unusual handling or stowage problem for the stevedore. The ship provides space and protection for the carton and

NOW... *soft, resilient*

PAD-PAK

*Extra Protection
for Your Products in Transit*



A TV cabinet is often the most looked-at piece of furniture in the home. That's why the original beauty of so many sets is protected from damage in transit by Pad-Pak.

Here is the ideal protective packing. Made of cotton wadding, Pad-Pak has resilience to absorb impact . . . to protect against scratches and rub marks. Glazed outer surface gives extra body, greater ease in handling, and permits accurate cutting to any shape.

But safeguarding cabinets in shipment is only the beginning of a long list of Pad-Pak uses. Any item subject to breakage or marring—from perfume bottles to polished metal parts — reaches its destination undamaged when cushioned with this extra soft, resilient material.

Ask for samples of Pad-Pak, stating your choice of thickness — from $\frac{1}{8}$ to $\frac{1}{2}$ inch. Write Dept. S.

IMMEDIATE DELIVERY

UNION WADDING CO.

Pawtucket, Rhode Island
SINCE 1820





Red Streak Sealing Tape is strong
... keeps out dust, dirt and moisture. No other form of closure gives so much for so little.



Those Gumming Specialists

The Brown-Bridge Mills, Inc., Troy, Ohio

TURN "WASTE" INTO PROFIT

Shred NEWS, MAGAZINES, OLD FILES
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The famous "Silver 10" paper shredder makes a first class packing material at amazing speed for its low cost. Write today for complete details including information on the FREE TRIAL.

INDUSTRIAL SHREDDER & CUTTER CO.
707 S. Elsworth Ave. **Salem, Ohio**

light cases the same as it does for steel, unboxed cars, heavy machinery, and all other miscellaneous commodities. The cargo in the vessel must be segregated according to port for discharging or loading, whichever the case may be. The cargo must also be stowed from the standpoint of weight distribution and stowage to allow the vessel to proceed from port to port to load or discharge without unnecessary delay.

The responsibility of producing a good package rests with one group. The responsibility of handling and outturning the package in good condition at its destination lies with another. The responsibility of one can not, or rather, should not be transferred to the other. If the package is produced poorly, it is difficult for the handling agencies to deliver it in good condition. If the cargo is properly packaged at its place of origin, it is the responsibility of the handling group to deliver a good outturn.

"Export Packaging" like other problems of similar magnitude is far reaching. This fact is brought out very clearly in the deliberations of the Packaging Committee, Maritime Association of the Port of New York.

The stevedores are prepared with equipment, staff, and "know how," to do their part in this very worthwhile endeavor to improve the outturn of our goods abroad. Perfection in this whole project of export packaging may be asking more than anyone interested is prepared to suggest. Improvement is a reasonable request and possible of attainment if all will assume their own responsibility.

Expanding Traffic Departments

(Continued from Page 13)

specifications can easily learn government specifications. It is simply a matter of adapting his knowledge of packing to the various title symbols and numbers used by the government in issuing its packing requirements. These can be quickly picked up and applied by anyone who already has the basic packing knowledge.

6. What are the specific titles of positions available to a trained man about to enter the traffic and shipping field?

The following are typical beginning positions, starting at salaries of 50 to 70 dollars a week:

1. Clerk in the Traffic Department
2. Routing Clerk
3. Dispatch Man
4. Demurrage Man
5. Claim Clerk

A full qualified rate clerk, such as a man who has completed one full year of study, would be entitled to the position of:

A-1 Rate Man

which is good for a salary of \$85 a week and up to start.

7. What executive positions could a good traffic manager ultimately achieve?

Top-notch traffic managers earn \$15,000 a year and

more. There is no real limit, it depends to a great extent on the initiative and ability of the individual himself. A man who saves his company many thousands of dollars a year can set his own salary peaks.

Mr. Traver pointed out that 99% of the students in traffic courses already have jobs in traffic themselves. A traffic reference library is available for both present and past students which provides information on any question which may arise in the course of business. Many companies, Mr. Traver added, actually pay for the courses through which the students are sent.

Perhaps one of the most important things which a traffic school can do, is to prepare a student for the examination before the Interstate Commerce Commission. Passing this examination entitled a traffic manager to practice before the Interstate Commerce Commission. This is a very remunerative career, Mr. Traver said, as it also enables the individual to set up his own business or service in which he solicits traffic cases.

The obvious conclusion to be drawn is that while courses in traffic management are always useful, they are particularly important and valuable in a time when the economy, as now, is expanding in both defense and civilian production, and requires more and better packing, routing and shipping than ever before. The need for trained men to supervise these operations is the greatest in history.

OVERSEAS SHIPPERS!

**Guard your outer
Packing Lists
against weather,
rough handling,
and unauthorized
access with**



FABCO PACKING LIST PROTECTORS

Made of water-repellent asphalt composition board, Fabco Packing List Protectors are quickly applied with nails or staples. Packing lists are kept legible, easy to find and ready for immediate identification.

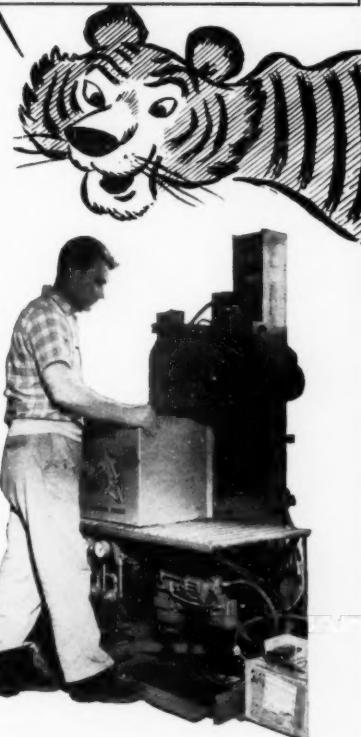
FABCO Packing List Protectors are approved and used by Army Quartermasters, various Navy Departments, by Signal, Marine and Medical Corps and by prime and subcontractors operating under the Armed Services. They are listed in Navy Catalogue under Stock #53-P-38250-230. The material complies with Specification MIL-B-3106 and tentative Ordnance Specification AXS-1623. Slotted separators and solid filler pads can be supplied of the same material.

Write for descriptive Bulletin 511

**FABRICATED PRODUCTS COMPANY
WEST NEWTON, PA.**

MEN — METHODS — MATERIALS

**Not only closes 'em faster
— but better too!**



• Here's our Staple Toothed Tiger sticking his nose in where it belongs again—in the shipping departments of customers who are turning out stronger and neater shipments with their INTERNATIONAL RETRACTABLE ANVIL STAPLE MACHINES. Mr. T. is especially proud of this installation, because there are target airplane motors (needed for our defense effort), being shipped in those cartons, and it's a sure bet that they will arrive in A-1 condition—guarded all the way against pilferage and damage by the sturdy International Staples.

If you ship your product in corrugated or fibre containers, "Close 'em faster and better—and more economically too" with an INTERNATIONAL RETRACTABLE ANVIL STAPLE MACHINE... They close filled cartons from the outside, tops and bottoms simultaneously!



**INTERNATIONAL STAPLE
& MACHINE COMPANY**

HERRIN ILLINOIS

EST. 1938

THE STAPLE TOOTHED TIGER DISTRIBUTORS IN PRINCIPAL CITIES

*all purpose
shipping room
tacker!*

L3 LEVER TACKER

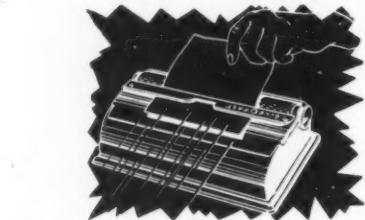
**MORE USE
MEANS
MORE VALUE**

5 SIZE STAPLES

11/64" L3A SHORT staple	tacking tags to thin veneer boxes.
1/4" L3A staple	tagging hardwood boxes • crates barrels • lining freight cars.
5/16" L3B staple	tagging boxes • crates • barrels stock bins.
15/32" L3M staple	attaching hardware bags, packing lists, repairing wire bound crates, corrugated patching of sides and floors of freight cars.
9/16" L3D staple	repairing half corrugated cases, wire bound boxes, closing tote boxes.

(For information on other model tackers and shipping room supplies write)

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Industrial Products Division (Dept. JC-2)
200 Hudson St. New York 13



Glue+Fast LABEL GLUER

**Saves 8 Man hours
A Day . . . Says Buchelt Produce, Calmar, Ia.
"Cut Labeling Time in 1/2"**

Use ungummed labels and save costs, time and waste. Ideal for all labeling, on any surface . . . wood, metal, glass, cartons, porcelain, etc.

Send for free sample of Glue, stating to what surfaces your labels are applied.

**10 Day Free Trial No Obligation!
Write for Details**

GLUE-FAST EQUIPMENT CO.
11-M WHITE STREET NEW YORK 13, N. Y.

Nuts Used in Palletizing

(Continued from Page 18)

either end of the nut. Several types are available.

One is a Teenut with three long prongs and a long barrel which can be driven into the deck boards, guided by the bolt hole that has been previously drilled. The capscrew or bolt is inserted and tightened from the bottom side of the pallet. The second type is a Teenut with three holes in the flange which can be used with either a carriage bolt or capscrew and the Teenut tightened by means of a spanner wrench or power-driven wrench. The third is an upturned, hex-shaped, flanged Teenut which permits the use of a hand or power socket wrench either on the inside or the outside of the upturned, hex-shaped flange. The bolt hole has to be counterbored approximately $\frac{1}{8}$ of an inch in depth for flush requirements, because of the height of the upturned flange.

Tests for Normal Usages

Tests for normal usages indicate that these locking-type Teenuts, as judged by their resistance to fatigue, give a very satisfactory and safe performance. The method of testing is to measure the Teenuts for tension in pounds, then submit them to a specially designed vibration machine, where the specimens are tested for gripping action, recheck for tension, and finally submit them to artificial weather conditions that will produce in a short time the same results that normal atmospheric conditions would produce during a reasonable length of time. At the end of these tests, the Teenut must still be safe to use. Tests have also indicated that the resistance to rotation of the screw is approximately proportionate to the amount of squeeze, and that for different conditions it is advantageous to hold the amount of squeeze between set limits. In the manufacture of Teenuts, the pressed or squeezed portions of the barrel are controlled. In other words, the torque desired to insert or remove the bolt is maintained very closely.

Wooden and plywood box makers producing knock-down returnable cases and crates for domestic use and specially constructed shipping cases and crates for export use can utilize Teenuts not only as a labor-saving device but as fastener which will eliminate to a large extent claims for pilferage and damage while the case is in transit. To increase the strength of a knockdown box, angular metal edges, made of .035" carbon steel strip, heat treated and having slots to take care of misalignment, are used in conjunction with pronged Teenuts or counterbored Teenuts to bolt all six panels. The top and bottom panels can be permanently bolted to one flange of the angular metal edges and likewise to the edges of the two end panels. If the angular metal edges have each flange 1" wide, the entire box when knocked down won't take up more than 2" in height. All that is necessary to set up the box at the user's plant is to bolt the edges of the two side

panels to the remaining flanges of the corner supports. Each of the end corners is interlocked three ways. Such a box, made up of $\frac{1}{4}$ " five-ply panels 12" x 12" x 18" and .035" carbon steel angular metal edges, will support a load of five tons without crushing. It will weigh four pounds less than a fully-cleated plywood box of the standard "B" type, and will require 25 percent less cubic space.

Tests Prove Value

The carbon steel angle supports or metal edges are not expendable, and each successive trip reduces the original cost. The plywood panels may also last a number of trips, and those which are not mutilated can be salvaged. A laboratory test on several similar boxes showed the following results:

(1.) One box, when filled with 242 pounds of loose Teenuts, took 30 drops in a 14' revolving drum with no signs of failure.

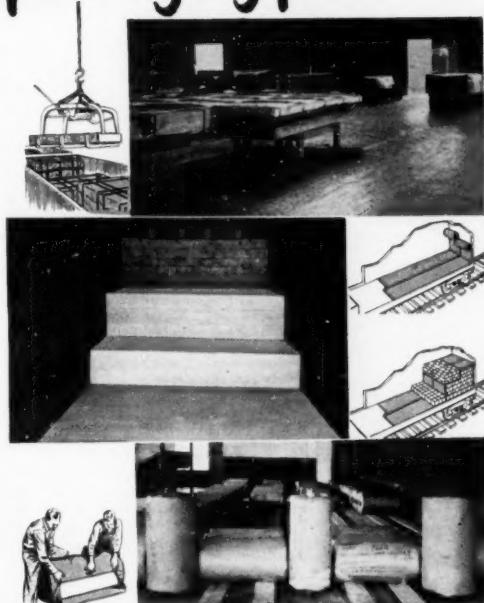
(2.) A second and empty box withstood 2,150 pounds of compression, deflecting from normal $\frac{5}{8}$ of an inch when one plywood panel started to crack but returned to normal when the pressure was released.

(3.) A third box with 242 pounds of Teenuts was put through a corner-wise drop test by means of a block and tackle and a suitable releasing device. The box was dropped upon each of its eight corners in succession from a height of 12" and then on two diagonally opposite corners at 24", followed by a drop on two other diagonally opposite corners at 36", and finally on one corner at 65", without any damage showing. This box was shipped to Detroit by rail express and returned by overland truck with no defects showing. It was reshipped to Detroit by rail freight and returned in the same manner. The slots in the oval heads of the stove bolts were worn down, indicating the rough riding it had received in the freight car, but there were no other defects or failure. Allen screws would be safer to use in actual practice to eliminate the wearing down of stove bolt heads from rough riding in freight cars.

Knock-down cases, crates and pallet bins can also be set up through the use of a double-barrel Teenut ($\frac{3}{8}$ "-16), which is formed into a right angle. The wood panels are bolted to each leg of the right angle. One leg of the right angle Teenut can be permanently bolted to each panel, or two adjacent panels can be bolted permanently. The two sets of adjacent panels forming the case or bin can be shipped nested, the user bolting the two remaining diagonally opposite corners.

Capital expenditures of Class I railroads for new locomotives, freight and passenger cars and other equipment as well as roadway and structures are expected, according to the Interstate Commerce Commission to be approximately \$1,376,400,000 in 1951, or an increase of about \$355,400,000 compared with such expenditures in 1950.

What's your packaging problem?



FIBREEN ASSURES COMPLETE PROTECTION

You will find FIBREEN has everything you need for protective packaging or wrapping, because . . .

1 — **FIBREEN is STRONG . . .** rugged, laminated kraft sheets, reinforced with tough, closely cross-laid sisal fibres.

2 — **FIBREEN is MOISTURE-PROOF . . .** double layers of highest quality asphalt prevent moisture penetration.

3 — **FIBREEN is CLEAN . . .** both top and bottom sheets are surface-treated, top-grade No. 1 Kraft.

Qualified consultants are available to help you use FIBREEN to best advantage in solving your package-protection problems.



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for free samples and data.

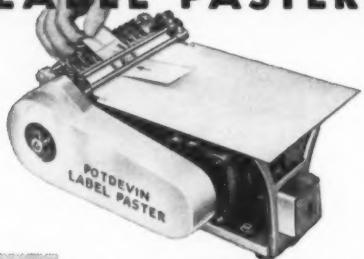
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SUPER SAW**

AIR COOLED
TAT'S FINE



- ... Faster than pulling nails.
- ... Faster than breaking wire or strapping.
- ... NO damage to crates. Compact shock storage, 100% re-usable lumber.
- ... NO accidents from exposed nail points.

Built-in blower keeps SUPER SAW comfortably cool even under continuous use. Replaceable "Oilite," phosphor bronze and high speed ball bearings throughout. Fastest, safest and cheapest way of opening crates you've ever tried! Write for Bulletin No. P-4 and price today.

R.C.S. TOOL SALES CORPORATION
JOLIET, ILLINOIS, U.S.A.

Reading Problems of Shipping Executives Increase Annually

In addition to the multiplicity of shipping manuals and other required reading—reports, four to five publications—every day something is written of use to the shipping executive that he simply cannot get to. Executives now spend from 45 minutes to three hours daily on *must reading*, and it is on the increase.

Reading is an acquired skill, like a good game of golf or bridge, and can be improved greatly in both speed and comprehension by training at The Reading Laboratory in N. Y.

Few adults read as rapidly as their capacities allow. While most adults read at only two hundred words per minute, a speed of four hundred words per minute is easily within their grasps. Traffic men are tied to their desks after hours. Because of ineffective reading, too, companies' operating expenses are up and profits are down!

Increases ranging from 50 percent to as much as 300 per cent have been registered at The Reading Laboratory within the past year by students drawn from every major industry. The average gain made at The Laboratory by business executives has been 160%.

The thirty hours spent at The Laboratory give the student individual training and supervision by a well-qualified staff, in addition to practice on the most modern training instruments. The Reading Laboratory is completely equipped with the best of modern devices for the measurement of reading ability. Instruction may be arranged at any time during the week at The Laboratory. For programs sponsored by large commercial and industrial firms, it is possible to have the training conducted within the offices of the participating firm.

Business people who have taken the course at The Reading Laboratory report that they have been able to save up to two hours a day in time that is devoted to reading the thousands of pamphlets, newspapers, magazines, and books that cross the desk of the busy executive in a year. It has been said that if every literate American over fifteen who spends two or more hours a day in reading could be given thirty hours of effective reading training, the saving in time required to do the nation's work-day reading, valued at 50c an hour, would amount to more than \$5,000,000,000 annually.

"Listen, Mr. Traffic Manager"

(Continued from Page 19)

the letters and rerun them through the machine again using the correct date with postage set at double O."

Since publication we have received word from the postoffice department asking that this information be retracted, "since it is not consistent with the regulations. Under no circumstances, may the meter indicia be tampered with or corrected by any means once it has been printed on the mail."

"Matter bearing meter indicia from which the

700 Foot Roller Conveyor Speeds Up Motorcycle Materials Handling



Start of some 700 feet of roller conveyor utilized in new parts and accessories Dept. of the Harley-Davidson Motor Co., Milwaukee, Wis., manufacturer of motorcycles. New system and new equipment speeds up orders to dealers.

Occupying 21,000 square feet the department houses over 5000 three-foot bins arranged in ten tiers.

date has been omitted, or is not the date of mailing, when the date is required, is treated in accordance with existing instructions when presented at the post-office for mailing. Furthermore, there are provisions in the regulations for submitting unused complete impressions, which have been printed in error, for a refund, but any impressions that have been altered in any way by the mailer, are not valid for postage."

We can only say that we regret this error in our interpretation and presentation of information.

The classification section of the Postoffice department in Boston states that if the wrong date is on packages or letters this should be called to the attention of the postal authorities who will file a report on same. If such an accident happens three times within three months there will be a penalty of 10% of postage.

Government agencies throughout the country—Federal, State, county and local—own and operate more than twice as many trucks as they do automobiles. The totals are 350,000 trucks, compared with only 145,000 automobiles.

An illustration showing a hand holding a roll of "On-to-Sta" gummed sealing tape. The tape is being applied to the top flaps of a rectangular cardboard box. The box is shown from a three-quarter perspective, with the tape being applied to the top edge. The background is plain white.

PLAY SAFE
WITH
GUMMED SEALING TAPE . . .
5 WAY PROTECTION

- 1 REINFORCES YOUR CARTONS
- 2 IS EASY TO APPLY
- 3 IS MOISTURE RESISTANT
- 4 IS DUST PROOF AND SANITARY
- 5 IS PILFER PROOF

SEAL THE RIGHT WAY WITH

"On to Sta"

SEALING TAPE

PLAIN OR PRINTED

SAMPLE BOOK ON REQUEST



NO OTHER CLOSURE DOES SO MUCH FOR SO LITTLE



**"Boss,
this is
the best
Marker
I've ever used"**



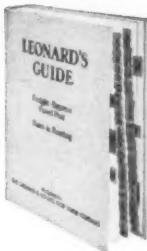
It's no wonder that the Flo-master is the "Popular Choice" in shipping rooms from coast to coast. It's ideal for bold and fine marking of boxes, crates, bags, cartons. Interchangeable felt tips make lines varying in thickness from $\frac{1}{8}$ in. to 1 in. Spring valve permits finger tip control of ink flow. Lightweight but sturdy aluminum construction. "Pocket Size" for general use — "King Size" for heavy-duty marking. Used with Flo-master Inks—instant-drying, waterproof, non-smudging.

Ask your supplier or write to
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153 W. 23rd St., N. Y., N. Y.

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FELT-TIP MARKER

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Mfr's Association Proposes Solution To R. R. Car Shortage

In recognition of the seriousness of the growing freight car shortage, manufacturers in California today proposed a plan to help the railroads make more cars available to shippers everywhere. The formula as outlined by the California Manufacturers Association is simple, but it requires the cooperation of all industry and agriculture.

It simply provides that all shippers clean their cars before releasing them to the railroads for other shippers' use.

The program now being urged on shippers everywhere was evolved by the state-wide Freight Traffic Committee of the association. The committee found a large floating supply of freight cars constantly out of service because debris and Dunnage prevents their immediate use by other shippers.

Trouble Found in Car Maintenance

The committee reported its findings to the association's board of directors. The board was told (a) railroads now lack the manpower to promptly clean all cars before spotting for loading by shippers; (b) serious delays are occasioned by routing cars to the yards for cleaning; and (c) while it ordinarily is the responsibility of the railroads to furnish clean cars, shippers can contribute materially to car availability by cleaning debris and Dunnage from all unloaded cars before turning them back to the railroads.

The CMA board recommended that all industry and agriculture be asked to cooperate in a move to utilize existing cars more efficiently.

Wm. B. Tyler, President of the Association, in a message to shippers said:

"The railroad car shortage during the summer and fall of 1951 will be the severest ever experienced."

"Unfortunately, very little relief is in sight from new car construction. The most promising opportunity to provide relief in freight car supply is in the more efficient use of the cars available."

Shippers Can Do Much

"While there are certain places where railroads can improve their own operations, and constant pressure is being put on them to do so," Mr. Tyler said, he emphasized that "much remains to be done by shippers in expediting the loading and unloading of cars and in reducing the time cars are held within industrial plants."

He also urged each shipper to take full credit for cleaning cars by posting a placard to that effect in each clear car.

He mentioned that the cost of the program to individual shippers would not be large. Anyway, he said, "the cost of cleaning the cars you make empty will be negligible in comparison to the ultimate cost of a crippling car shortage."

Recording Parcel Post

(Continued from Page 15)

satisfactory for the Receiving Clerk, could not be considered desirable for an office clerical

The steps of doing the work were:

1. Receiving Clerk called data
 - a. Shippers name
 - b. Point of origin
 - c. Insurance number, if insured
 - d. Amount of Postage
 - e. Department number
2. Typist called back the receiving number (a progressive number).
3. Receiving Clerk wrote, with ink pencil, the receiving number onto the package.

We installed a dictating machine to which the receiving clerk now dictates the same information.

We have a consecutive numbering device installed in a standard marking machine chase. This device preprints labels with the receiving number.

We use a plastic vending device for attaching the labels to the packages.

Typing of the receiving sheet is done in the office where there are no interruptions.

Time of Receiving Clerk is reduced 7 seconds per package. Time of the typist is reduced 14 seconds per package. This is a saving of 21 seconds per package.

Translated to a month of receipts, this means 81.6 one person hours.

The investment in equipment is small. Supplies cost no more than by previous practice.

We will improve the job still further whereby we will reduce work and increase production.

The economy is small, to be sure. The important thing is that while the operation is small and the saving in labor is small, we know that there are many more operations that can be improved with study.

Navy Packing Research

(Continued from Page 17)

of various load patterns for a variety of commodities for the most efficient unit load.

PRESERVATION—Equipment, techniques and procedures for the preservation of commodities and equipment for both long and short term storage and for shipment and storage in a variety of climates.

FORK TRUCKS—An investigation of non-skid tires for use on wet surfaces. The standardization of controls among various fork truck manufacturers so that the operation of a fork truck is similar to that of an automobile. Investigations of proper truck stability and capacity ratings.

SHIP LOADING—Improved ship loading methods, techniques and procedures. The

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America's finest GUMMED TAPE!

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for better results anywhere



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• Saves Postage —

The package weighed on this Parcel Post Scale will not carry too many — or too few — stamps.

• Saves Time —

Speeds mailing department flow. Ends weighing bottleneck. Shows instant the zone key. One finger shows the exact postage. No postage-due delays... ever!



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BOTH BAGS AND ROLLS

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An Exhaustive Article on
STEEL STRAPPING**

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By THOMAS WOLFE

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Pan American World Airways

725 pages, 104 Illus., 185 graphs and tables, \$8.00

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Government Regulation and Development
CAA and Safety Regulation
Airline Organization
Airline Revenue and Costs
Airline Finances

Traffic Organization and Management
Terminal Procedures and Problems
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development of a preliminary design of a cargo ship that provides the maximum facility for the shipment and handling of unit loads.

WAREHOUSING—The development of improved methods, systems and techniques for the warehousing of a wide variety of commodities and materials, and a standard storage plan. The evaluation of improved pallet racks, improved safety devices and promulgation of instructions for their use.

PACKAGING—The development of standardized packaging techniques and specifications for Navy material that provides the optimum of protection for rough handling in a variety of temperature and humidity ranges. The packages must be readily suited for unit loading.

Waterproof Fibre Board

(Continued from Page 14)

$\frac{1}{2}$ " of the seams of the container and no further apart than $2\frac{1}{2}$ ".

b. Containers must also be reinforced with steel strapping before it will meet full government approval. Flat strapping of $\frac{1}{4}$ " x 0.015" may be used for weights up to 35 pounds. Heavier containers weighing up to 70 pound require $\frac{3}{16}$ " x 0.015" flat strapping. Strap joints must be at least 75 per cent as strong as the strapping itself.

The first problem the shipper has been facing is that of securing fibre, V or W board as at the outbreak of the Korean situation very few container manufacturers were concentrating on waterproof fibre. There was no great demand for it. The situation has reversed itself. Some plants are now manufacturing only solid fibre and others are alternating between corrugated and solid fibre. "Shipping Management's" Product Research Section can supply the names of firms now manufacturing solid fibre, V and W boards.

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Poor Handling Causes 75% of Damage To Rail-Shipped Goods: Miller to Philly SIPMHE

"Seventy-five per cent of the damage to goods shipped via rail occurs in handling as between shipping and handline. Most of this is pure carelessness brought about by ignorance or lack of interest," said Mr. George Miller, Traffic Manager, S. S. White Dental Manufacturing Co., speaking on the topic of Perfect Shipping. Mr. Miller spoke at a recent meeting of the Philadelphia Regional Division, Society of Industrial Packaging and Materials Handling Engineers.

Mr. Miller approached his subject from the viewpoint of the Association of American Railroads, citing the figures for loss and damage claims against the railroads for the past several years. He discussed his work with a committee assisting the railroads to reduce damages, already having succeeded to bring the figure down from a high of 139 millions of dollars to approximately 80 millions last year. The first two months of 1951 showed losses amounting to \$1,945,609.00, a decrease of \$118,000.00 from a similar period of 1950.

Some Shippers Uncooperative

Although some shippers are uncooperative, not feeling any responsibility for proper packaging, Mr. Miller felt that the railroads fail to press the needs for proper preparedness by educating shippers. Much attention and effort is given to educating the operating railroad personnel through leaflets, posters, diagrams of good car-loading, careful handling, etc., but little is done to tell the shipper of what he should do in packaging and packing.

In contrast, truckers examine the shipments before assuming responsibility very thoroughly. Packages not meeting strict standards are turned down and not accepted for shipment by truck. This cuts damages radically and educates the shipper.

Mr. Miller spoke of the efforts of his committee in educating railroad shippers, and of their hopes that this year's damages could be kept as low as 30 millions. He cited the method used by his firm to insure proper care in packaging and packing for shipments between the various branches of his company throughout the country. Whenever a damaged shipment is found, professional photographers are hired to take pictures of the damaged items as they were delivered. These pictures are then enlarged, framed and hung on the wall of the office of the man in charge of packaging that item at the plant of origin. The expense of photography, framing, etc. is charged against the employee whose office wall is so decorated. This has been found to cut damages to an absolute minimum.

Following Mr. Miller's talk, Phil Gelber, Chairman of the Technical Committee for the Division, acted as moderator for a general discussion of packaging problems. These varied from the packaging of fluorescent light tubes to the proper handling of marble shipments



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Reading Ability of Executives And Airmen Found Near Lowest

Many intelligent and well educated people, including executives and Army Air Forces officers, are only about one step ahead of near-literates when it comes to reading ability, Dr. Murray Lincoln Miller, chief of reading improvement headquarters of the Air University, Maxwell Field, Montgomery, Ala., said yesterday. He spoke at a meeting of the American Management Association in the Statler.

"When we tested the reading ability of air force officers we were a little shocked at the results," Dr. Miller said. "But we got over that when we tried the same tests on doctors, lawyers, and business executives—they were even worse."

Dr. Miller emphasized that no one should be ashamed of reading poorly. Ineffective readers tested at armed forces schools have included the vice-president of a steel company and a four-star general. Most are able to double their reading speed with proper training, and some are able to reach speeds as high as 1,000 words a minute.

These speeds, he explained, are not attained by learning to skim: trained readers read every word and appear to comprehend better than slow readers.

Dr. Miller believes that industry might well institute reading courses for those in its employ, especially executives. "They need it most," he said, "because they need to do more reading and to comprehend better."

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from abroad to prevent cracking from a ship's vibration, from the effectiveness of cadmium plating to how to handle fiberboard sheets 72" x 120" in placing in or out of box cars. It was decided to hold a similar brief discussion of members' problems at each succeeding meeting.

Wider Use of Modern MH Equipment Would Up U. S. Capacity 10%

A minimum increase of 10% in America's industrial capacity can be achieved through wider and more thorough use of modern materials handling equipment, it was stated here today at the opening of the National Materials Handling Exposition at International Amphitheatre.

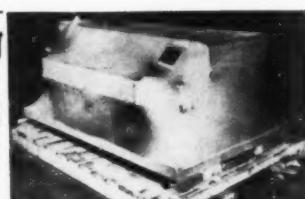
In a specially prepared statement, Mr. Elmer F. Twyman, Vice-President-In-Charge of Yale & Towne Manufacturing Company's Philadelphia Division, said further, "At this very moment, booming defense orders threaten to tax our industrial capacity, already operating under a full head of steam from present military needs coupled with a continuing high level of civilian purchasing. Unless we can quickly accelerate productivity we are faced with trimming the latter substantially and thus lowering our standard of living. Not only can modern materials handling accomplish such a task, but it can do it cheaper and more expeditiously than the building of new plant facilities."

Mr. Twyman pointed out that in many plants, handling of materials frequently requires more time than it takes to actually process them. "Materials handling is the soft underbelly of production," he said, "Beside wasting time and energy of skilled labor, poor handling practices also waste critically short storage space and slow-up distribution."

The transportation output of the average freight train reached an all-time high in 1950, being equivalent to moving more than 20,000 tons of freight one mile in an hour, which is nearly 14 percent above the peak output of the years of World War II and almost three times as much as it was 30 years ago.

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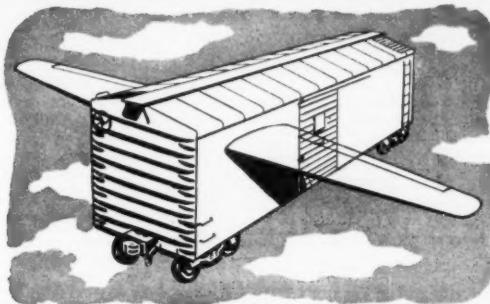
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HANDBOOK . . . for gummed tape users. Everything you'll ever want to know about gummed tape sealing problems. Free if you check 3.

NEW, MORE COVERAGE . . . in the 1950 Better Shipping Manual. Let us bill you for the latest edition of this encyclopedia of essential fact and information for the shipping room. Copy on approval if you check 4.

GUMMING SPECIALISTS . . . Good paper, good glue and plenty of it to insure a permanent closure. For details and sealing helps check 5.

PARCEL POST SCALE . . . Simply press the zone key. One figure shows the exact postage. Descriptive bulletins free, if you check 6.



Each numbered paragraph below describes practical, illustrated literature about the newest developments in shipping room supplies, devices and equipment . . . important data every alert, progressive shipping manager should keep filed and available for instant reference. It will pay you to read each item carefully, select those that help with your particular shipping problems. Then all you need do is check and mail the coupon. Shipping Management will see that the material is forwarded with no obligation on your part.

QUICK CALCULATOR . . . of cargo content. This all plastic calculator gives quick accurate cubic readings. Line up length, width and height, scales and calculation is given in cubic feet. Prices, check 7.

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BETTER READING ABILITY . . . makes a better executive. Traffic and shipping managers, too, can take advantage of the need to rapidly read tariffs, bills of lading and other official forms. Find out about a way of learning to read faster, more efficiently and more profitably by checking **41**.

News

(Continued from Page 22)

train operation was higher than ever before attained.

Tons of freight moved one mile for each hour of train operation averaged 19,708 ton-miles in the six months' period this year, a high average never before attained. In 1949 the average for the year was 19,023 ton-miles and in 1944, the peak year in World War II, it was 17,623 ton-miles.

Freight trains on the average moved 1.2 per cent faster in the first six months of 1950 than they did in the same period of the previous year and 8 per cent faster than in 1944.

The average load per freight train for Class I railroads in the first six months of 1950 was 1,175 tons compared with 1,149 in the same period in 1949, and 1,139 tons in 1944. The average in the first half of 1950 was higher than ever before attained, except in 1948 when it was 1,176 tons.

C. E. WHITTEN, PRES. GAIR CO. (CAN.) PASSES AWAY

Charles E. Whitten, president of Gair Company Canada Limited, Toronto, died suddenly on April 18. His age was 62.

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Last June, Mr. Whitten became president and general manager of that company, and was subsequently also elected a director of Robert Gair Company, Inc., New York, manufacturers of folding cartons, paperboard and shipping containers.

Mr. Whitten had previously held office as vice president, treasurer and director of the Canadian company since its inception in 1934.

NATIONAL CARLOADING OPENS STATION AT JACKSON- MICH.

Opening of a National Carloading Station at Jackson, Michigan, for solicitation and handling of freight in the area was announced in New York by Mr. Paul J. Coughlin, Vice President, National Carloading Corporation.

The station, situated at 531 Liberty Street, will be managed by Mr. Laurence E. Curry, formerly office manager of the Lansing, Michigan, station of the company.

ATA FILES STUDY OF NATION'S TRUCK TIRE REQUIREMENTS FOR 1951 WITH DEFENSE TRANSPORTATION ADMINISTRATION

A detailed formal study of the nation's truck and bus tire requirements for 1951, totalling 15,738,000 tires, has been filed with the Defense Transportation Administration by American Trucking Associations, Inc.

The report reflects the same figures delivered informally by ATA to NPA, DTA and other agencies and resulted from industry-government discussion over many previous months and from ATA's survey of trucking industry needs by questionnaires.

Prepared before recent releases of additional rubber stocks to the tire industry by government agencies, the report points out that sub-normal inventories of tires and the approach of warmer weather—hard on tires—have been threatening a serious predicament for commercial vehicles.

The truck bus tire total includes 11,138,000 replacements and 4,610,000 for new equipment including the medium and heavy trucks and truck trailers outlined December 15, 1950 by ATA to DTA as 1951 requirements. In addition to truck-bus tires, the report fixes 1951 requirements for passenger-car type tires for light trucks under 5,000 pounds gross at 3,202,000 replacement tires and 1,468,000 for original equipment.

Tire production under government regulation has failed to keep pace with the postwar expansion of the commercial vehicle fleet and its greater mileages under impact of the defense program, the report concludes.

DTA is expected to consider the report along with earlier data in formulating continuing claims upon other government agencies for the production it decides is needed.

QUARTERLY FREIGHT CAR LOADINGS 6.5% OVER 1950 PERIOD

Freight carloadings in the second quarter of 1951 are expected to be 6.5 percent above those in the same period of 1950,

according to estimates just compiled by the 13 regional Shippers Advisory Boards and made public today.

On the basis of those estimates, freight carloadings of the 32 principal commodity groups will be 7,993,831 cars in the second quarter of 1951, compared with 7,507,009 actual carloadings for the same commodities in the corresponding period in the preceding year. Eleven Shippers Advisory Boards estimate an increase and two estimate a decrease in carloadings for the second quarter of 1951 compared with the same period of 1950.

New Products

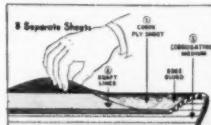
(Continued from Page 20)

1½ to 1¾ lbs. In tests, precision metal parts and glass items have been imbedded in mold-like cavities of the material without any harm coming to the item after repeated drop tests and rough handling.

Foamed Plastic has the ability to cushion by virtue of the cells giving only so far after which a rubbery type resiliency takes place as the cells partially break down. The result is a firmer cushioning action which gives greater protection. Pioneering in the use of Foamed Plastic for the packaging field is Glo-Brite Products, Inc.

PROTECTIVE PACKAGING MATERIAL

Multiflex, a new and unusual product, has been introduced by Sherman Paper Products Corporation, for stronger, scuff-resistant protective packaging of products shipped by industry.



This packaging material fulfills a long-time need in the packaging field, by providing a high level of protection that hitherto required much greater weight and higher costs.

The construction of Multiflex, with the crepe backing sheet edge-glued to the

Kraft Corroflex, gives the new Multiflex a protective combination of cushioning, wrap flexibility, slippage to blows and puncture-resistance. The flysheet of kraft, between the corrugated flutes and the crepe backing, allows the wrap to shift slightly with impacts or glancing blows, turning the force of the shock and protecting the enclosed product.

TAPE CATALOGUE

"Scotch" brand pressure-sensitive tapes that meet government specifications are listed in a new pocket sized catalog available from Minnesota Mining and Manufacturing Co.

The booklet lists eight official U. S. government specifications for tape, including 20 tab-sections, and cites the corresponding tape for each section.

Included are specifications for masking tape, cellophane tape, electrical tape, photographic tape, drafting tape, and packaging tape.

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by Richard C. Colton
General Traffic Manager, RCA Victor Division, Radio Corporation of America

A clear explanation of
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work



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**Water-Resistant Coating
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TYPE 2 on smooth barrier materials

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EC-824 and EC-843 also suitable.

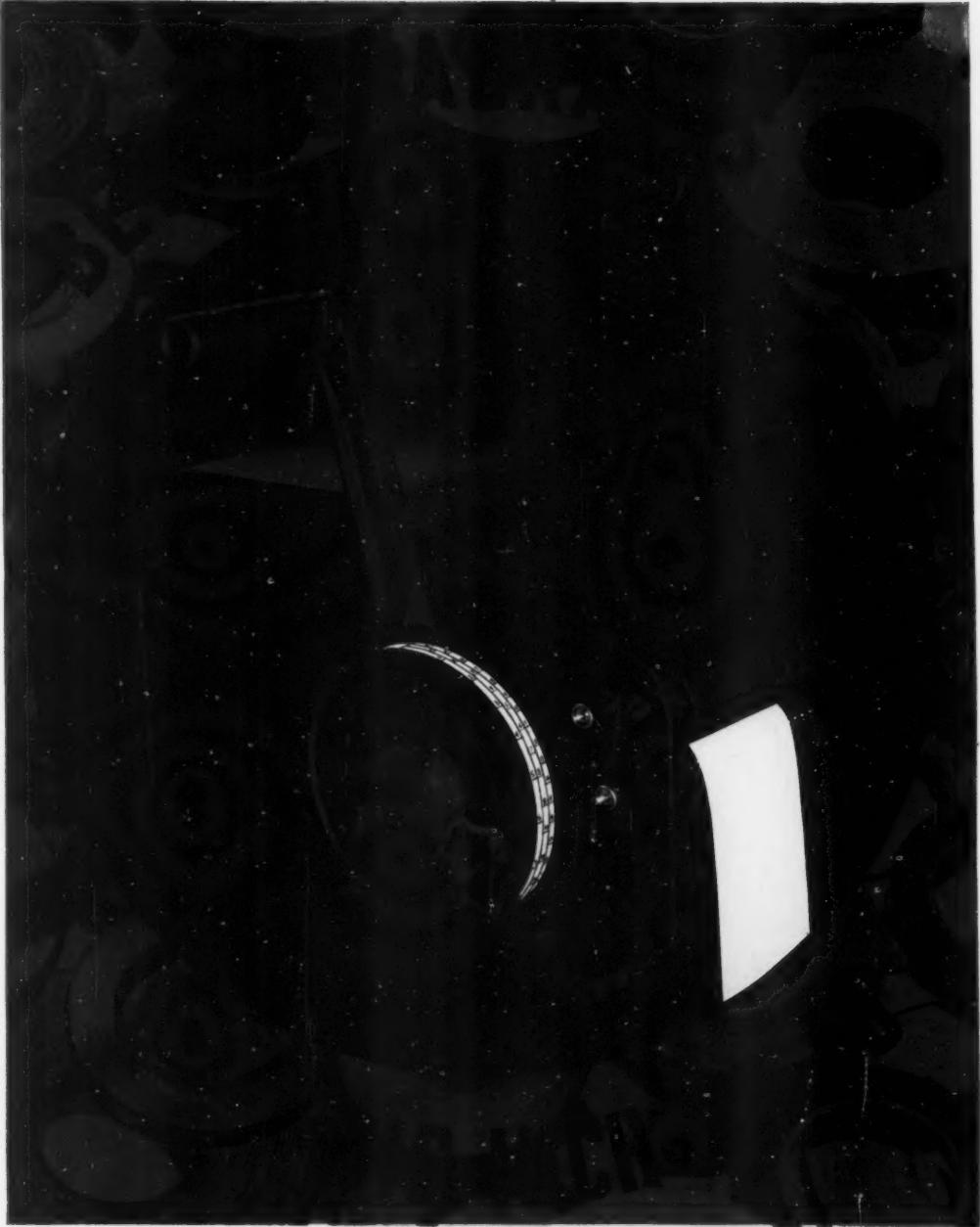
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**Water-Resistant Label
Adhesive**

- TYPE 1** by use on fiberboard surfaces
TYPE 2 by use on wood surfaces
TYPE 3 by use on black box surfaces
TYPE 4 by use on galvanized iron

We recommend EC-1032

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